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10/737,029	12/16/2003	Daniel SauFu Mui	ZIL-568	4506

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EXAMINER	
BROWN, VERNAL U	
ART UNIT	**PAPER NUMBER**
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DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/737,029	MUI, DANIEL SAUFU	
	Examiner	Art Unit	
	Vernal U. Brown	2612	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *06 August 2006*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-26* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *11,12 and 17* is/are allowed.

6)☒ Claim(s) *1-10,13-16,19-21,18,22-26* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

This action is responsive to communication filed on August 06, 2006.

Response to Amendment

The examiner has acknowledged the amendment of claims 11, 13, 17, 19, and the addition of claims 25-26.

Response to Arguments

Applicant's arguments filed August 6, 2006 have been fully considered but they are not persuasive.

Applicant argues on page 10 that the reference of Wouters does not disclose a remote control device with a keypad that receive a signal in a radio frequency range and transmit a signal in a infrared frequency band, it is the examiner's position that Wouters teaches a remote control represented by the system of devices 1 and 2 that includes a receiver (13), keypad (3) and a transmitter (14) that transmit infrared code that received radio frequency signal (col. 3 lines 21-35).

Applicant's argues 11 (claims 14-16) that the reference of Wouters does not teach a key code that corresponds both to a function of an electronic consumer device as well as to a second function of a second electronic consumer device, it is the position Wouters teaches a key code generator (3) for generating key codes for controlling different function on various electrical appliances (col. 1 lines 24-26, col. 3 lines 21-35). The key codes for controlling the different devices inherently includes a first and second key code.

Regarding applicant's argument regarding claim 24 on page 12, Wouters teaches the microcontroller controlling the operation of the remote by converting the key code indications, which is the function to be performed by the device, into IR control signal and the IR control signal is transmitted by the remote control to the electronic device (col. 4 lines 50-60).

Regarding applicant's argument regarding claims 1, 3-4, and 9, Pope teaches receiving a keystroke indicator signal which contains an indication of a key on the remote control device 10 that was pressed (col. 2 lines 61-col. 3 line 19), generating a key code (codes for communicating the control function to the appliances) within the code generator 12. Applicant's describe the key stroke indicator signal as the signal that indicate which key on the remote control was pressed (page 3 lines 6-9) and also disclosed that the key code corresponds to a function of the electronic device (page 1 paragraph 003).

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 13-16, 19, 22, and 24-26 are rejected under 35 U.S.C. 102(e) as being anticipated by Wouters et al. US Patent 6915109.

Regarding claims 13 and 22, Wouters et al. teaches a remote control which includes the system of devices 1 and 2 (figure 1) comprising a receiver receiving a RF modulated remote control signal (col. 4 lines 25-28) and a transmitter transmitting an infrared modulated signal generated from the received RF signal (col. 4 lines 28-33). Wouters et al. also teaches the key code corresponding to the key of keypad is transmitted when the key is selected (col. 4 lines 4 lines 48-57).

Regarding claims 14-16, Wouters et al. teaches the key code corresponding to the key of keypad is transmitted when the key is selected (col. 4 lines 4 lines 48-57). A key code corresponding to a second and third key code is therefore transmitted based on the selected key. Wouters et al. teaches fetching the data from memory corresponding to the key code (col. 4 lines 55-58). The data from the memory is inherently store as binary data. The key code therefore comprises binary data.

Regarding claims 19, Wouters et al. teaches a key code generator (3) for generating key codes for controlling different function on various electrical appliances (col. 1 lines 24-26, col. 3 lines 21-35). The key codes for controlling the different devices inherently includes a first and second key code. Wouters et al. teaches an antenna (9) for transmitting the key code from the key code generator to a remote control (12) and the remote control 12 transmit the key code to the selected appliances (col. 3 lines 31-34). Wouters et al. teaches the key code receive by the remote control is demodulated, decoded and transmitted to the appliance (col. 4 lines 25-37). The key code is therefore not stored in the memory of the remote control .

Regarding claim 24, Wouters et al. teaches a microcontroller in the form of a microprocessor for receiving the key code (col. 4 lines 52-55).

Regarding claims 25-26, Wouters et al. teaches receiving a key stroke indicator signal (5) from a remote control (3) and the key code indicator signal is use by key code generator 8 to generate a key code (col. 3 lines 21-30);

modulating the key code signal unto a carrier and transmitting the key code to the remote control (12) (col. 4 lines 28-33) and the remote control transmit the key code to the electronic device (col. 3 lines 31-34). Wouters et al. teaches the key code receive by the remote control is demodulated, decoded and transmitted to the appliance (col. 4 lines 25-37). The key code is therefore not stored in the memory of the remote control .

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 1, 3-4, 9 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pope US Patent 5963624 in view of McNair et al. US Patent 5595342.

Regarding claim 1, Pope teaches receiving a keystroke indicator signal which contains an indication of a key on the remote control device 10 that was pressed (col. 2 lines 61-col. 3 line 19), generating a key code (codes for communicating the control function to the appliances) within the code generator 12 and transmitting the key codes to the appliances (col. 3 lines 35-40). Pope is however silent on teaching modulating the key code onto a carrier signal. McNair et al. in an art related control system teaches the control signal is modulated and transmitted to the controlled apparatus as a conventional practice (col. 2 lines 61-65).

It would have been obvious to one of ordinary skill in the art to modulate the key code onto a carrier signal in Pope because modulation of the key code enables the key code signal to be transmitted wirelessly to the appliances and this also represents a conventional practice.

Regarding claim 3, Pope teaches the key code generator 12 transmitting key code signal (control codes) to the consumer devices (col. 3 lines 35-40).

Regarding claim 4, Pope teaches the key code is indicated by low and high (col. 3 lines 45-47) implying the key code signal include ones and zeroes.

Regarding claim 9, Pope teaches the code generated by the code generator 12 is transmitted to the appliances (col. 3 lines 36-40). The code generated by the code generator is not store in the remote control because it is transmitted to the appliances.

Claim 2 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pope US Patent 5963624 in view of McNair et al. US Patent 5595342 and further in view of Goldstein US Patent 5410326.

Regarding claim 2, Pope teaches the remote control receiving key code signals (infrared control signal) from a controller (col. 4 lines 52-56) but is silent on teaching the key code generator transmit key codes to the remote control device. Goldstein in an art related programmable remote control invention teaches a key code generator in the form of a cable box (cable box is considered a key code generator, see page 3 lines 4-5 of the applicant's specification) transmitting key codes to the remote control (col. 13 lines 50-57) in order to update the remote control with new control codes.

It would have been obvious to one of ordinary skill in the art for the key code generator to transmit the key code to the remote control in Pope in view of McNair et al. because this provides the means for updating the remote control with new codes.

Claims 5 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Pope US Patent 5963624 in view of McNair et al. US Patent 5595342 and further in view of Teskey US Patent 6747568.

Regarding claim 5, Pope teaches generating a key code for controlling the consumer appliances (col. 3 lines 35-40) but is silent on teaching the key code comprises timing information defining the binary number is modulated. Teskey in an art related remote control system teaches the format of the remote control signal having the necessary timing and modulation information (col. 3 line 60-col. 4 line 8).

It would have been obvious to one of ordinary skill in the art for the key code to include comprises timing information defining the binary number is modulated in Pope in view of McNair because the timing information defining the binary number is modulated represent information regarding the format of the remote control signal that enables the decoding and demodulating of the receive key code signals.

Regarding claim 10, Pope teaches generating a key code for controlling the consumer appliances (col. 3 lines 35-40) but is silent on teaching the key code comprises timing information defining the binary number (ones and zeroes) is modulated. Teskey in an art related remote control system teaches the format of the remote control signal having the necessary timing and modulation information (col. 3 line 60-col. 4 line 8).

It would have been obvious to one of ordinary skill in the art for the key code to include comprises timing information defining the binary number is modulated in Pope in view of McNair because the timing information defining the binary number is modulated represent information regarding the format of the remote control signal that enables the decoding and demodulating of the receive key code signals.

Claim 6 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pope US Patent 5963624 in view of McNair et al. US Patent 5595342 and further in view of August et al. US Patent 5671267.

Regarding claim 6, Pope teaches the use of the remote control to control the functions of the appliances (col. 2 line 61-col. 3 line 22) but is not explicit in teaching transmitting a keystroke indicator signal that cause the appliance to turn on. One skill in the art recognizes that

a remote control is generally use in turning an appliance on/off and is further evidenced by August et al. (col. 8 lines 3-5).

It would have been obvious to one of ordinary skill in the art for the remote control to transmit a keystroke signal for turning the appliance on in Pope in view of McNair because Pope suggests the use of the remote control to control the functions of the appliances and one skill in the art recognizes that a remote control is generally use in turning an appliance on/off and is further evidenced by August et al.

Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pope US Patent 5963624 in view of McNair et al. US Patent 5595342 and further in view of Wouster et al. US Patent 6915109

Regarding claim 7, Pope teaches the remote control receiving key code signals (infrared control signal) from a controller (col. 4 lines 52-56) and the remote control transmits control signal to the appliances (figure 1) but is silent on teaching modulating the key code onto carrier signal that is in the infrared frequency band. Wouters et al. in an art related remote control invention teaches a remote control receiving a RF modulated remote control signal (col. 4 lines 25-28) and a transmitter transmitting an infrared modulated signal generated from the received RF signal (col. 4 lines 28-33).

It would have been obvious to one of ordinary skill in the art to modulate the key code onto carrier signal that is in the infrared frequency band in Pope in view of McNair because infrared signal represents an alternative to radio signal used in the transmission of remote control signal.

Claim 8 is rejected under 35 U.S.C. 103(a) as being unpatentable over Pope US Patent 5963624 in view of McNair et al. US Patent 5595342 in view of Wouster et al. US Patent 6915109 and further in view of August et al. US Patent 5671267.

Regarding claim 8, Pope teaches the use of the remote control to control the functions of the appliances (col. 2 line 61-col. 3 line 22) but is not explicit in teaching transmitting a keystroke indicator signal that cause the appliance to turn on. One skill in the art recognizes that a remote control is generally use in turning an appliance on/off and is further evidenced by August et al. (col. 8 lines 3-5).

It would have been obvious to one of ordinary skill in the art for the remote control to transmit a keystroke signal for turning the appliance on in Pope in view of McNair in view of Yamaguchi because Pope suggests the use of the remote control to control the functions of the appliances and one skilled in the art recognizes that a remote control is generally use in turning an appliance on/off and is further evidenced by August et al.

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wouters et al. US Patent 6915109 in view of Teskey US Patent 6747568.

Regarding claim 18, Wouters et al. teaches the remote control transmit command codes to perform various functions (col. 4 lines 4 lines 48-57). Wouters is silent on teaching the key code comprises timing information defining the binary number is modulated. Teskey in an art related remote control system teaches the format of the remote control signal having the necessary timing and modulation information (col. 3 line 60-col. 4 line 8).

It would have been obvious to one of ordinary skill in the art for the key code to include timing information defining the binary number is modulated in Wouters et al. because the timing information defining the binary number represents information regarding the format of the remote control signal that enables the decoding and demodulating of the receive key code signals.

Claims 20-21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Wouters et al. US Patent 6915109 in view of August et al. US Patent 5671267.

Regarding claims 20-21, Wouters teaches the use of the remote control to control the functions of the appliances (col. 3 lines 31-35) but is not explicit in teaching transmitting a keystroke indicator signal that cause the appliance to turn on. One skill in the art recognizes that a remote control is generally use in turning an appliance on/off and is further evidenced by August et al. (col. 8 lines 3-5).

It would have been obvious to one of ordinary skill in the art for the remote control to transmit a keystroke signal for turning the appliance on in Wouters because Wouters suggests the use of the remote control to control the functions of the appliances and one skill in the art recognizes that a remote control is generally use in turning an appliance on/off and is further evidenced by August et al.

Claim 23 is rejected under 35 U.S.C. 103(a) as being unpatentable over Wouters et al. US Patent 6915109 in view of Pope US Patent 5963624.

Regarding claim 23, Wouters teaches transmitting key codes to remote control (see response to claim 13) but is not explicit in teaching the key code is not store on the remote

control prior to the remote control receiving the key code. Pope in an art related remote control teaches the remote control receiving control codes updates (col. 4 lines 52-60). The receipt of the code update by the remote control implies that the code was not previously stored in the remote control prior transmitting the updates to the remote controller.

It would have been obvious to one of ordinary skill in the art for the key code is not store on the remote control prior to the remote control receiving the key code because the key codes transmitted to the remote control is used as a means of programming the remote control with new codes.

Allowable Subject Matter

Claims 11-12, and 17 are allowed.

Regarding claims 11-12, the prior art of record fail to teach or suggests no more than a single one of the key codes is present on the remote control at any given time.

Regarding claim 17, the prior art of record fail to teach or suggests the first and second key code are not stored in the device at the same time.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO

MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Vernal U. Brown whose telephone number is 571-272-3060. The examiner can normally be reached on 8:30-7:00 Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wendy Garber can be reached on 571-272-7308. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Vernal Brown
October 4, 2006

BRIAN ZIMMERMAN
PRIMARY EXAMINER